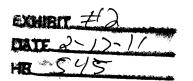
FIRELINE HANDBOOK



CHAPTER 1— FIREFIGHTING SAFETY

MENT

RISK MANAGEMENT	4
The Risk Management Process	4
Look Up, Down and Around Indicators	7
Tactical Watch-Outs	8
Wildland-Urban Watch-Ours	9
Safety While Protecting Structures From	
Wildland Fires	. 10
LCES Checklist	. 10
Escape Routes and Safety Zones	
Safety Zone Guidelines	
Last Resort Survival	
Downhill Checklist	.17
Common Denominators of Fire Behavior on	
Tragedy Fires	
Thunderstorm Safety	. 19
Clothing and Personal Protective	
Equipment (PPE)	
How to Properly Refuse Risk	
After Action Review	.24
FIREFIGHTER HEALTH	
Fatigue - Work and Rest	
Food and Nutrition	
Firefighter Rehabilitation	
Driving Limitations	
First Aid	
CPR	.30

Carbon Monoxide Poisoning	31
Hypothermia	33
Heat Stress	
Burn Injury Treatment	35
Burn Notification Procedures	37
Rule of Nine	38
Injury Fatality Procedures	
ENTRAPMENT	40
Firefighter Entrapment	
Fire Shelter Deployment	
Building Refuge Vehicle Refuge	
vencie Reinge	
ORGANIZATIONAL	47
General Responsibilities	
Qualifications	
Training	
Supervision of Other Firefighters	
Safety Officer (SOF1/2/3)	
Fire Behavior Analyst (FBAN)	49
	**
OPERATIONAL GUIDELINES	
Safety Briefing	
Fire Weather Forecast	
Fire Danger Rating	
Safety Precautions Under Extreme	
Fire Behavior	
Night Operations	
Personnel Transportation	
Foot Travel	
Line Scouting	
Line Construction	
Safety Flagging Standards	
Firing Equipment	57
Chain Saws	57
Hazard Trees	
Harard Tree Cufain	50

Chapter 1 - Fireflighting Safety

SAFETY FIRST—NO EXCEPTIONS

This is the basic form of the Fire Line Handbook, also known as 410-1

- Versions of this handbook may include geographic information, weather, dangerous animals, and area specific travel, and/or be disasters specific.
- Developed by different agencies, states and even private companies [Examples: USFWS/Hurricane and Delta Response Manual, FEMA/Housing Handbook for Responders, CDF (California Department of Forestry)/has a handbook for hotel managers as well].

This handbook is essentially a supplement to the Fireline Handbook, stating basic guidelines and common sense suggestions.

This handbook, or portions of it, could be made available on line.

Felling	59
Engine Operations	60
Dozer Tractor Plow Operations	
Safety Guidelines	63
Power Line Hazards	67
Suspected Hazardous Materials	68
Incident-Generated HAZMAT	69
Unexploded Ordinance (UXO)	70
UXO Safety and Reporting	71
Helicopter Transportation	71
Aerial Retardant Helibucket Operations	73
Paracargo Operations	74
Managing Vehicle Traffic Under	
Severe Smoke Conditions	75
Essential Incident Response Driving	

Chapter 1 - Firefighting Safety

62

- Lower the dozer blade and/or fire plow to the ground when the equipment is idling or stopped.
- Do not get immediately in front or behind equipment in operation.
- When working with a dozer or tractor-plow unit, stay at least 100 feet in front or 50 feet behind
- Allow no one but the operator to ride on the equipment.
- Never get on or off of moving equipment.
- Provide front and rear lights for equipment working at night or in heavy smoke.
- Provide lights and fluorescent vest to personnel working with dozer tractor-plow units to ensure visual contact with the operator.
- Use hand signals for direction and safety. (See Appendix A for hand signals.)
- Do not use a dozer or tractor-plow without a canopy, brush guard, and radio communications.
- Operators will wear required safety clothing and carry a fire shelter.
- Be sware of different fuel types and their flammability.

✓ Identify any hazards.

- Brief crew on safety zone plan, tactical plan, escape plan (to safety zone and for refuge).
- Crew stays close to structure.

Power Line Hazards

If possible, the power company should deactivate lines in the fire area that may endanger firefighters. All personnel should be cautioned against directing water streams or aerial retardant into high-tension lines. They should also be made aware that the smoke may become charged and conduct the electrical current

Deactivated transmission and distribution lines may continue to pose a hazard due to conduction.

- Identify, map, and discuss at briefings all electrical lines on the incident.
- When around power lines:
 - If a power line falls on your vehicle, DON'T leave vehicle until the power company arrives. If the vehicle is on fire or fire is near, jump clear, DON'T hang on, keep feet together and bumy hop away.
 - Minimize operation of heavy equipment under power lines.
 - DON'T drive under power lines with long antennas.

Chapter 1 - Firefighting Safety

67

Chapter 1 - Firefighting Safety

Managing Vehicle Traffic Under Severe Smoke Conditions

3

Smoke has the potential to cause severe safety hazards to vehicle traffic in the vicinity of active fires, especially at night.

- When potential smoke-related problems are identified:
 - Advise the Agency Administrator that severe smoke conditions exist.
 - Implement preplanned actions such as posting "smoke warning" signs.
 - Ensure proper equipment is ready and appropriate personnel are briefed on contingency plans and are available to control traffic.
 - Notify local law enforcement units of potential problem.
- Establish periodic patrols to monitor smoke impacted areas.
- When smoke-related traffic problems occur, first person on the scene must maintain traffic control until relieved. He or she should take immediate action to prevent injuries and damages by:
 - Establishing control points on both sides of the impacted area.

Chapter I - Fireflighting Safety

 Slowing or stopping traffic entering the area and advising drivers of alternate

- Assigning a person to keep a log of what actions are taken.
- Ensuring warning signs are in place and any other preplanned actions have been implemented.
- Notifying personnel who have been identified and equipped to direct traffic and notify other local units having responsibilities for traffic control.
- Implementing radio and television traffic advisories for the impacted area.
- Smoke moving unexpectedly into an area may be an indication of changing burning conditions. All traffic should be excluded until this change can be evaluated.
- When smoke-related traffic accidents occur, fire personnel on the scene should:
 - Make all efforts to assist and protect people.
 - Notify, if necessary, appropriate medical units and request assistance.
 - Notify appropriate law enforcement units.
 - Provide additional personnel for traffic control, if necessary.

Chapter 1 - Firefighting Safety

78

Essential Incident Response Driving

"ARRIVE ALIVE!"

76

Always drive defensively

Reducing response vehicle speed can prevent rollovers

Red traffic signals and stop signs mean complete STOP

Insist that vehicle occupants use seat belts

Verify vehicle occupants are seated and belted

Evaluate road surface and weather conditions

Abide by federal and state motor vehicle laws

Lengthy response distances require frequent rest stops

Initiate standard vehicle backing operating procedures

Value occupant and public safety versus time and speed

Enter dangerous curves and intersections cautiously